

Steph
File 4a
6/6/1991

Facility: U.S. Department of Energy, Hanford

ID no. WA789000 8967

Date of Inspection: June 4 & 5, 1991

Date of Report: June 6, 1991

Address: Hanford Reservation
Richland, Washington 99352

Report Prepared by: Jack Boller, *Jack Boller* Environmental Protection Specialist
Washington Operations Office
EPA Region 10

Inspector: Jack Boller, EPA/WOO
Dan Willey, Ecology
Scott McKinney, Ecology
Mike Osweiller, Ecology
Megan Lerchen, Ecology

Purpose:

This inspection was conducted to gather information on facility compliance with applicable regulations for management of hazardous waste under the Washington State and United States hazardous waste laws and to provide oversight of the state program.

General Facility Process Information:

The Hanford Reservation is approximately 570 square miles in area, located in Benton County, Richland, Washington. In early 1943, the U.S. Army Corps of Engineers selected the Hanford site as the location for reactor, chemical separation, and related facilities and activities for the production and purification of plutonium. Activities at the site are centralized in numerically designated areas. The reactor facilities are located along the Columbia River in what are known as the 100 areas. The reactor fuel processing and waste management facilities are in the 200 Areas. The 300 Area contains the reactor fuel manufacturing areas and the research and development laboratories. The Fast Flux Test Facility is located in the 400 Area. The 1100 Area contains the facilities associated with maintenance and the nonradioactive dangerous Waste Landfill is located in the 600 Area. Other research and development laboratories are found in the 3000 Area. Administrative buildings are located in the 700 Area in downtown Richland.

The reservation is owned and operated by the U.S. Department of Energy (DOE) through its contractors of which Westinghouse Hanford Company (WHC) is the prime contractor. The other contractors at the reservation are: Pacific Northwest Laboratory (PNL); Hanford Environmental Health Foundation (HEHF); and Kaiser Engineers Hanford Company (KEH).

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Early in 1989 DOE, Ecology, and EPA signed an agreement that set down a schedule for permitting, closure, and corrective action under both RCRA and CERCLA. A number of permits are being processed and a number of closures are being conducted. The facility is operating as an interim status land disposal facility.

Inspection:

At 9:00 a.m. on June 4, 1991 Mr. Dan Willey, Mr. Scott McKinney, Mr. Mike Osweiller, and I arrived at the Central Waste Complex (CWC) on the Hanford reservation. We were joined by Mr. Bob Holt and Mr. Gerry Bell of U.S. DOE and by Mr. Tony Miskho and Mr. Mike Hall of WHC. Mr. Willey as the lead inspector had contacted the facility one hour prior to our arrival and explained our agenda. At the CWC facility we were required to go through a safety briefing and then to have our training checked through a computer tracking system. After discovering that none of Ecology or EPA personnel were in the system Mr. Holt finally contacted DOE management and convinced them that EPA and Ecology were responsible for their personnel and the facility tracking system did not apply to them. After a one and a half hour delay we were allowed to enter the site.

The unit consists of twelve 4000 square feet metal buildings with sealed, concrete floors. The total capacity per building is 1100 drums. A new 34,000 square foot building has just been completed but was not yet occupied. There was also an outside storage pad at the site.

Building 2402-WC had a damaged overhead door that was left open awaiting repairs. There was a large amount of bird droppings and stains on the floor. According to unit staff the stains resulted from rainwater which blew in through the open door and then evaporated. There were approximately 900 drums in the building. They were stacked three high on pallets in five rows. Aisle space appeared to be adequate.

We walked the length of the complex looking through the door in each building. In building 2402-WH several pallets were broken or bowed. We suggested that the pallets be replaced to prevent shifting and toppling of drum stacks.

The outdoor storage pad was being used to temporarily store 1580 drums from waste generated by the RCRA closure of the 183-H evaporation ponds. The pad is concrete with a four inch curb around it. Drums were stacked against the curb. The drums were corroded and could potentially rupture and release waste over the curb to the surrounding soil. The facility plans to have all of these drums overpacked and moved into the buildings by September 1991.

We reviewed inspection logs for the CWC unit. Documentation of corrective action for problems identified during inspections was not available. Corrective action was very difficult to track.

From the CWC we moved to the 183-H evaporation ponds at the north end of the reservation. This unit is undergoing closure. The concrete lined ponds have been drained and the sludge has been removed and drummed. This waste is all being stored at the CWC as mixed waste. Samples of the concrete have been sent for analysis to determine the proper method of management for these wastes. In final closure the concrete will be removed and the holes will be filled with clean fill.

We concluded day one of our inspection at 3:00 p.m. and drove back to town.

On June 5, 1991 we continued our inspection at the 616 Hazardous Waste Storage facility. Our inspection team was joined by Megan Lerchen of Ecology. Ms. Lerchen is the permit writer for the unit. We began with a tour of the outside of the building. There are two loading pads at the facility. The one on the east side of the building is used extensively. The one on the north side is rarely used. Each pad is surrounded by a carb and each has a sealed sump in the middle of it. The sumps have removable plug at one end to allow drainage of storm water to a french drain. The pads and floors in the building are scheduled to be resealed this summer.

We moved inside and toured the storage bays. Containers were in good condition and aisle space was adequate. A file review of inspection logs, operating records, contingency plan, training records, and manifests was conducted. The contingency plan at the facility did not have the current emergency coordinator listed. Some inspection logs did not adequately document corrective action for problems discovered during inspections.

From here we went back into town to building 1171-Vehicle Maintenance Shops. The shop recently moved, it is less than 90 days waste accumulation area from an outside pad to a building. The building is constructed of wood and metal with a concrete floor. Containers of liquid wastes are stored in secondary containment. The facility manager, Dennis Poor, stated that the Fire Department had inspected the building and felt it was safe. We toured the satellite accumulation areas and concluded the inspection at 3:00 p.m.

Conclusion:

Ecology will be following up on any compliance issues identified by the inspection, with regard to federal regulations the following concerns were noted:

1. Failure to adequately document corrective actions for deficiencies noted during inspection at the CWC and G16;
2. Broken pallets in drums stacks at CWC; and
3. Failure to properly identify the emergency coordinator in the contingency plan at 616.

One area of concern was the inordinate delay in gaining access to the CWC. The issue is the adequacy of safety training of inspectors. It is EPA's and Ecology's responsibility to assure that their personnel are adequately trained. It is not the facility's responsibility. There is national precedence for claiming denial of access for similar delays. If this situation arises again at Hanford, I would recommend that Ecology and/or EPA cite the facility for denial of access.

With regard to the oversight of Ecology, Mr. Willey appears to be an experienced inspector. He is knowledgeable in a broad range of environmental regulations. The inspection was conducted in a professional and thorough manner.

EXHIBIT IV-1

GENERAL SITE INSPECTION INFORMATION FORM

US DOE Hanford

A. Site Name B. Street (or other identifier)
C. City D. State E. Zip Code F. County Name

G. Site Operator Information

1. Name Bob Holt US DOE 2. Telephone Number FTS 444-1471
3. Street 4. City Richland 5. State WA 6. Zip Code 99352

H. Site Description

Nuclear Energy facility

I. Type of Ownership

☒ 1. Federal ☐ 2. State ☐ 3. County ☐ 4. Municipal ☐ 5. Private

J.

☒ 1. Generator ☐ 2. Transporter ☒ 3. Treatment ☒ 4. Storage ☒ 5. Disposal

K. Regulatory Status

☒ 1. Interim Status ☒ 3. Part B Permit Application Submitted
☐ 2. Permitted Facility ☐ 4. Part B Permit Application in Preparation

L.

1. Principal Inspector Name Jack Boller 3. Organization EPA R40/WOO
2. Title EPS 4. Telephone No. (area code and No.) FTS 434-9428 (206) 753-9428

M. Inspection Participants

1. Dan Willey Ecology	6.
2.	7.
3.	8.
4.	9.
5.	10.

EXHIBIT IV-2

GENERAL FACILITY CHECKLIST

Section A - General Facility Standards

1. Does facility have EPA Identification No.? ☒ Yes ☐ No

a. If yes, EPA I.D. No. WA 789 000 8967
If no, explain. _____

2. Has facility received hazardous waste from a foreign source? ☐ Yes ☒ No

a. If yes, has it filed a notice with the Regional Administrator? ☐ Yes ☒ No

Waste Analysis

3. Does facility maintain a copy of the waste analysis plan at the facility? ☒ Yes ☐ No

a. If yes, does it include:

1. Parameters for which each waste will be analyzed? ☒ Yes ☐ No

2. Test methods used to test for these parameters? ☒ Yes ☐ No

3. Sampling method used to obtain sample? ☒ Yes ☐ No

4. Frequency with which the initial analyses will be reviewed or repeated? ☒ Yes ☐ No

5. (For offsite facilities) waste analyses that generators have agreed to supply? ☒ Yes ☐ No

6. (For offsite facilities) procedures which are used to inspect and analyze each movement of hazardous waste, including:

a. Procedures to be used to determine the identity of each movement of waste. ☒ Yes ☐ No

b. Sampling method to be used to obtain representative sample of the waste to be identified. ☒ Yes ☐ No

4. Does the facility provide adequate security through:

a. 24-hour surveillance system (e.g., television monitoring or guards)? ☒ Yes ☐ No

OR

(continued)

EXHIBIT IV-2 (continued)

- b. 1. Artificial or natural barrier around facility (e.g., fence or fence and cliff)? ☒ Yes ☐ No

Describe _____

AND

2. Means to control entry through entrances (e.g., attendant, television monitors, locked entrance, controlled roadway access)? ☒ Yes ☐ No

Describe Hanford Patrol

General Inspection Requirements

5. Does the owner/operator maintain a written schedule at the facility for inspecting:

- | | |
|--|---|
| a. Monitoring equipment? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| b. Safety and emergency equipment? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| c. Security devices: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| d. Operating and structural equipment? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| e. Types of problems of equipment: | |
| 1. Malfunction | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 2. Operator error | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 3. Discharges | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

6. Does the owner/operator maintain an inspection log? ☒ Yes ☐ No

- a. If yes, does it include:

- | | |
|---|---|
| 1. Date and time of inspection? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 2. Name of inspector? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 3. Notation of observations? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 4. Date and nature of repairs or remedial action? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

- b. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet.) ☐ Yes ☒ No

Personnel Training

7. Does the owner/operator maintain personnel training records at the facility? ☒ Yes ☐ No

(continued)

EXHIBIT IV-2 (continued)

How long are they kept? _____

a. If yes, do they include:

1. Job title and written job description of each position? ☒ Yes ☐ No
2. Description of type and amount of training? ☒ Yes ☐ No
3. Records of training given to facility personnel? ☒ Yes ☐ No

Requirements for Ignitable, Reactive, or Incompatible Waste

8. Does facility handle ignitable or reactive wastes? ☒ Yes ☐ No

a. If yes, is waste separated and confined from sources of ignition or reaction (open flames, smoking, cutting and welding, hot surfaces, frictional heat), sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat?

1. If yes, use narrative explanation sheet to describe separation and confinement procedures.
2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

b. Are smoking and open flame confined to specifically designated locations? ☒ Yes ☐ No

c. Are "No Smoking" signs posted in hazardous areas? ☒ Yes ☐ No

d. Are precautions documented (Part 264 only)? ☒ Yes ☐ No

9. Check containers

a. Are containers leaking or corroding? ☒ Yes ☐ No

b. Is there evidence of heat generation from incompatible wastes? ☒ Yes ☐ No

Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion, or contamination of the environment? ☐ Yes ☒ No

If yes, use narrative explanation sheet to explain.

(continued)

EXHIBIT IV-2 (continued)

2. Is the facility equipped with:

- a. Internal communication or alarm system? ☒ Yes ☐ No
1. Is it easily accessible in case of emergency? ☒ Yes ☐ No
- b. Telephone or two-way radio to call emergency response personnel? ☒ Yes ☐ No
- c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment? ☒ Yes ☐ No
- d. Water of adequate volume for hoses, sprinklers, or water spray system? ☒ Yes ☐ No

1. Describe source of water _____

3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? ☒ Yes ☐ No
4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (Layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) ☒ Yes ☐ No
5. In the case that more than one police or fire department might respond, is there a designated primary authority? ☒ Yes ☐ No
- a. If yes, name primary authority Hanford
6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors, and equipment suppliers? ☒ Yes ☐ No
- a. Are they readily available to all personnel? ☒ Yes ☐ No
7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? ☒ Yes ☐ No
8. If State or local authorities decline to enter, is this entered in the operating record? ☒ Yes ☐ No

(continued)

EXHIBIT IV-2 (continued)

Section C - Contingency Plan and Emergency Procedures

1. Is a contingency plan maintained at the facility? ☒ Yes ☐ No
- a. If yes, is it a revised SPCC Plan? ☒ Yes ☐ No
- b. Does contingency plan include:
1. Arrangements with local emergency response organizations? ☒ Yes ☐ No
2. Emergency coordinators' names, phone numbers, and addresses? ☒ Yes ☐ No
3. List of all emergency equipment at facility and descriptions of equipment? ☒ Yes ☐ No
4. Evacuation plan for facility personnel? ☒ Yes ☐ No
2. Is there an emergency coordinator on site or on call at all times? ☒ Yes ☐ No

Section D - Manifest System, Recordkeeping, and Reporting

1. Does facility receive waste from offsite? ☐ Yes ☒ No
- a. If yes, does the owner/operator retain copies of all manifests? ☒ Yes ☐ No
1. Are the manifests signed and dated and returned to the generator? ☒ Yes ☐ No
2. Is a signed copy given to the transporter? ☒ Yes ☐ No
2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? ☐ Yes ☒ No
- a. If yes, is it accompanied by a shipping paper? ☐ Yes ☐ No
1. Does the owner/operator sign and date the shipping paper and return a copy to the generator? ☐ Yes ☐ No
2. Is a signed copy given to the transporter? ☐ Yes ☐ No
3. Has the owner/operator received any shipments of waste that were inconsistent with the manifest (manifest discrepancies)? ☐ Yes ☒ No
- a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? ☐ Yes ☐ No
1. If no, has Regional Administrator been notified? ☐ Yes ☐ No

(continued)

EXHIBIT IV-2 (continued)

4. Does the owner/operator keep a written operating record at the facility? ☒ Yes ☐ No
- a. If yes, does it include:
1. Description and quantity of each hazardous waste received? ☒ Yes ☐ No
 2. Methods and dates of treatment, storage, and disposal? ☒ Yes ☐ No
 3. Location and quantity of each hazardous waste at each location? ☒ Yes ☐ No
 4. Cross-references to manifests/shipping papers? ☒ Yes ☐ No
 5. Records and results of waste analyses? ☒ Yes ☐ No
 6. Report of incidents involving implementation of the contingency plan? ☒ Yes ☐ No
 7. Records and results of required inspections? ☒ Yes ☐ No
 8. Monitoring or testing analytical data (Part 264)? ☒ Yes ☐ No
 9. Closure cost estimates and, for disposal facilities, post-closure cost estimates (Part 264)? ☒ Yes ☐ No
 10. Notices of generators as specified in §264.12(b) (Part 264)? ☒ Yes ☐ No
5. Does the facility submit a biennial report by March 1 every even-numbered year? ☒ Yes ☐ No
Annual
- a. If yes, do reports contain the following information:
1. EPA I.D. number? ☒ Yes ☐ No
 2. Date and year covered by report? ☒ Yes ☐ No
 3. Description/quantity of hazardous waste? ☒ Yes ☐ No
 4. Treatment, storage, and disposal methods? ☒ Yes ☐ No
 5. Monitoring data under §265.94(a)(2) and (b)(2) (Part 265)? ☒ Yes ☐ No
 6. Most recent closure and post-closure cost estimates? ☒ Yes ☐ No
 7. For TSD generators, description of efforts to reduce volume/toxicity of waste generated, and actual comparisons with previous year? ☒ Yes ☐ No
 8. Certification signed by owner/operator? ☒ Yes ☐ No
6. Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest? ☐ Yes ☒ No
- a. If yes, has he submitted an unmanifested waste report to the Regional Administrator? ☐ Yes ☒ No
7. Does the facility submit to the Regional Administrator reports on releases, fires, and explosions; contamination and monitoring data; and facility closure? ☒ Yes ☐ No

EXHIBIT IV-4

GENERATOR'S CHECKLIST

Section A - EPA Identification No.

1. Does generator have EPA I.D. No?

☒ Yes ☐ No

a. If yes, EPA I.D. No. WA 7890008967

Section B - Manifest

1. Does generator ship waste offsite?

☒ Yes ☐ No

a. If no, do not fill out Sections B and D.

b. If yes, identify primary offsite facility(s). Use narrative explanation sheet.

Chempro

2. Does generator use manifest?

☒ Yes ☐ No

a. If no, is generator a small quantity generator (generating between 100 and 1000 kg/month)?

☐ Yes ☒ No

1. If yes, does generator indicate this when sending waste to a TSD facility?

☒ Yes ☐ No *N/A*

b. If yes, does manifest include the following information?

1. Manifest document No.

☒ Yes ☐ No

2. Generator's name, mailing address, telephone No.

☒ Yes ☐ No

3. Generator EPA I.D. No.

☒ Yes ☐ No

4. Transporter Name(s) and EPA I.D. No.(s)

☒ Yes ☐ No

5. a. Facility name, address, and EPA I.D. No.

☒ Yes ☐ No

b. Alternate facility name, address, and EPA I.D. No.

☒ Yes ☐ No

c. Instructions to return to generator if undeliverable

☒ Yes ☐ No

6. Waste information required by DOE - shipping name, quantity (weight or vol.), containers (type and number)

☒ Yes ☐ No

(continued)

EXHIBIT IV-4 (continued)

7. Emergency information (optional)
(special handling instructions, telephone No.) ☒ Yes ☐ No

8. Is the following certification on each manifest form? ☒ Yes ☐ No

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

9. Does generator retain copies of manifests? ☒ Yes ☐ No

If yes, complete a through e.

- a. 1. Did generator sign and date all manifests? ☒ Yes ☐ No
2. Who signed for generator?

Name _____ Title _____

- b. 1. Did generator obtain handwritten signature and date of acceptance from initial transporter? ☒ Yes ☐ No
2. Who signed and dated for transporter?

Name _____ Title _____

- c. Does generator retain one copy of manifest signed by generator and transporter? ☒ Yes ☐ No

- d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? ☒ Yes ☐ No

- e. Does generator retain copies for 3 years? ☒ Yes ☐ No

Section C - Hazardous Waste Determination

1. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)? ☒ Yes ☐ No

- a. If yes, list waste and quantities
(include EPA Hazardous Waste No.) _____

(continued)

EXHIBIT IV-4 (continued)

1. Does generator generate solid waste(s) listed in Subpart C that exhibit hazardous characteristics? (corrosivity, ignitability, reactivity, EP toxicity) ☒ Yes ☐ No
- a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) See annual report
- b. Does generator determine characteristics by testing or by applying knowledge of processes? _____
1. If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)? ☐ Yes ☐ No
- a. If equivalent test methods used, attach copy of equivalent methods used.
3. Are there any other solid wastes generated by generators? ☒ Yes ☐ No
- a. If yes, did generator test all wastes to determine nonhazardous characteristics? ☒ Yes ☐ No
1. If no, list wastes and quantities deemed nonhazardous or processes from which nonhazardous waste was produced (use additional sheet if necessary).
- _____
- _____
- _____

Section D - Pretransport Requirements

1. Does generator package waste in accordance with 49 CFR 173, 178, and 179 (DOT requirements)? ☒ Yes ☐ No
2. a. Are containers to be shipped leaking or corroding? ☐ Yes ☒ No
- b. Use sheet to describe containers and condition.
- c. Is there evidence of heat generation from incompatible wastes in the containers? ☐ Yes ☒ No
3. Does generator follow DOT labeling requirements in accordance with 49 CFR 172? ☒ Yes ☐ No
4. Does generator mark each package in accordance with 49 CFR 172? ☒ Yes ☐ No
- (continued)

EXHIBIT IV-4 (continued)

5. Is each container of 110 gallons or less marked with the following label?

☒ Yes ☐ No

Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator name(s) and address(es) _____

Manifest document No. _____

6. Does generator have placards to offer to transporters?

☒ Yes ☐ No

7. Accumulation time

- a. Are containers used to temporarily store waste before transport?

☒ Yes ☐ No

1. If yes, is each container clearly dated: Also, fill out rest of No. 7 (accum. time)

☒ Yes ☐ No

- b. 1. Does generator inspect containers for leakage or corrosion? (265.174 - Inspections)

☒ Yes ☐ No

2. If yes, with what frequency?

Weekly

- c. Does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line? (265.176 - Special Requirements for Ignitable or Reactive Wastes)

☒ Yes ☐ No

NOTE: If tanks are used, fill out checklist for tanks.

- d. Are the containers labeled and marked in accordance with Section D-3, -4, and -5 of this form?

☒ Yes ☐ No

NOTE: If generator accumulates waste on site, fill out checklist for General Facilities, Subparts C and D.

- e. Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel Training.)

☒ Yes ☐ No

8. Describe storage area. Use photos and narrative explanation sheet.

EXHIBIT IV-4 (continued)

Section E - Recordkeeping and Records

.. Does generator keep the following reports for 3 years?

- | | | | |
|----|--|---|-----------------------------|
| a. | Manifests and signed copies from designated facilities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. | Annual reports | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. | Exception reports | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. | Test results | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

2. Where are the records kept (at facility or elsewhere)? at facility

3. Who is in charge of keeping the records?

Name _____ Title _____

Section F - Special Conditions

- | | | | |
|----|---|------------------------------|--|
| 1. | Has generator received from or transported to a foreign source any hazardous waste? | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a. | If yes, has he filed a notice with the Regional Administrator? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. | Is this waste manifested and signed by a foreign cosignee? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. | If generator transported wastes out of the country, has he received confirmation of delivered shipment? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

EXHIBIT IV-6

CONTAINERS CHECKLIST

Section A - Use and Management

1. Are containers in good condition? ☒ Yes ☐ No

Section B - Compatibility of Waste With Container

1. Is container made of a material that will not react with the waste which it stores? ☒ Yes ☐ No

Section C - Management of Containers

1. Is container always closed while holding hazardous waste? ☒ Yes ☐ No
2. Is container handled so that it will not be opened, handled, or stored in a manner which may rupture it or cause it to leak? ☒ Yes ☐ No

Section D - Inspections

1. Does owner/operator inspect containers at least weekly for leaks and deterioration? ☒ Yes ☐ No

Section E - Containment (Part 264)

1. Do container storage areas have a containment system? ☒ Yes ☐ No

Section F - Ignitable and Reactive Waste

1. Are containers holding ignitable and reactive waste located at least 15 m (50 ft) from facility property lines? ☒ Yes ☐ No

Section G - Incompatible Waste

1. Are incompatible wastes or materials placed in the same containers? ☐ Yes ☒ No
2. Are hazardous wastes placed in washed, clean containers when they previously held incompatible waste? ☒ Yes ☐ No

(continued)

EXHIBIT IV-6 (continued)

3. Are incompatible hazardous wastes separated from each other by a berm, dike, wall, or other device? ☒ Yes ☐ No

Section H - Closure (Part 264)

1. At closure, were all hazardous wastes and associated residues removed from the containment system? ☒ Yes ☐ No
- N/A*

RCRA LAND DISPOSAL RESTRICTIONS INSPECTION

I. General Information

Facility:

U.S. Dept. of Energy Hanford

U.S. EPA ID No.:

WA 89000 8967

Street:

City:

RichlandState: Wac Zip: 99352

Telephone:

Inspection Date:

6/4/91Time: 9:00 (am/pm)

Weather Conditions:

NameAgency/TitleTelephone

Inspectors:

See report

Facility Representatives:

See Appendix B to determine which of the following LDR waste categories the facility manages:

	<u>Generate</u>	<u>Transport</u>	<u>Treat</u>	<u>Store</u>	<u>Dispose</u>
F001-F005 Solvents	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>	<u> </u>
F020-F023 and F026-F028	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
California List*	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>	<u> </u>
First Third [40 CFR 268.10]	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>	<u> </u>
Second Third [40 CFR 268.11]	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>	<u> </u>
Third Third [40 CFR 268.12]	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>	<u> </u>

* See Appendix A

2. Have both the listed and characteristic waste code been assigned, where a listed waste exhibits a characteristic? [40 CFR 268.9(a)]

Yes ☒ No ☐ NA ☐

Comments _____

3. Has multi-source leachate been assigned the F039 waste code?* [40 CFR 261.31]

Yes ☐ No ☐ NA ☒

*Leachate derived exclusively from F020-F023 and/or F026-F028 dioxin wastes retains the individual waste codes.

If yes, was single-source leachate combined to form multi-source leachate? [55 FR 22623]

Yes ☐ No ☐

Comments _____

C. Does the facility handle the following wastes (national capacity variances)?

1. F001-F005 contaminated soil and debris resulting from a CERCLA response action or a RCRA corrective action (expires - 11/08/90). [40 CFR 268.30(c)]

Yes ☒ No ☐ List _____

2. Dioxin contaminated soil and debris resulting from a CERCLA response action or a RCRA corrective action (expires - 11/08/90). [40 CFR 268.31(b)]

Yes ☐ No ☒ List _____

3. California list contaminated soil and debris resulting from a CERCLA response action or a RCRA corrective action (expires - 11/08/90). [40 CFR 268.32(d)(2)]

Yes ☒ No ☐ List _____

4. K048-K052 petroleum wastes (nonwastewaters; expires - 11/08/90). [40 CFR 268.35(b)]

Yes ☐ No ☒ List _____

5. Soil and debris contaminated with wastes that had treatment standards based on incineration set in the Second Third rule - F010, F024, K009, K010, K011, K013, K014, K023, K027, K028, K029, K038, K039, K040, K043, K093, K094, K095, K096, K113, K114, K115, K116, P039, P040, P041, P043, P044, P062, P071, P085, P089, P094, P097, P109, P111, U028, U058, U069, U087, U088, U102, U107, U190, U221, U223, U235 (expires - 06/08/91). [40 CFR 268.34(d)]

Yes ☒ No ☐ List _____

6. Soil and debris contaminated with wastes that had treatment standards set in the Third Third rule based on incineration, mercury retorting, or vitrification. See Appendix A; (expires - 05/08/92). [40 CFR 268.35(e)]
 Yes ___ No X List _____
7. The following nonwastewaters - F039, K031, K084, K101, K102, K106, P010, P011, P012, P036, P038, P065, P087, P092, U136, U151. (expires -05/08/92). [40 CFR 268.35(c)]
 Yes ___ No X List _____
8. The following wastes identified as hazardous based on a characteristic alone: D004 (nonwastewaters), D008 (lead materials stored before secondary smelting), D009 (nonwastewaters) (expires - 05/08/92). [40 CFR 268.35(c)]
 Yes X No ___ List _____
9. Inorganic solid debris as defined in 40 CFR 268.2(g)*; includes chromium refractory bricks carrying EPA Hazardous Waste Nos. K048-K052 (expires - 05/08/92). [40 CFR 268.35(c)]
 Yes ___ No X List _____
10. RCRA hazardous wastes that contain naturally occurring radioactive materials (expires - 05/08/92). [40 CFR 268.35(c)]
 Yes ___ No X List _____
11. Wastes listed in 40 CFR 268.10, 268.11, and 268.12 that are mixed radioactive/hazardous wastes (expires - 05/08/92)*. [40 CFR 268.35(d)]
 Yes X No ___ List _____

*Note: Incorrect reference [40 CFR 268.2(a)(7)] in Third Third rule.

*Note: 40 CFR 268.10 and 268.11 wastes incorrectly omitted from this variance in the Third Third rule.

RCRA LAND DISPOSAL RESTRICTION INSPECTION

III. GENERATOR REQUIREMENTS

A. Treatability Group/Treatment Standard Identification*

*Note: This information is generally available on LDR notifications. If not, waste profile data and other documentation should be checked.

1. F001-F005 Spent Solvent Wastes: Does the generator correctly determine the appropriate treatability group/treatment standard for each F-solvent?

Yes ☒ No ☐ NA ☐

If available, list each waste code and check the correct treatability group.

Waste Code	Wastewater*	Nonwastewater
_____	_____	_____
_____	_____	_____
_____	_____	_____

*Less than 1% by weight total organic carbon (TOC), or less than 1% by weight total F001-F005 solvent constituents listed in 40 CFR 268.41, Table CCWE. [40 CFR 268.2(f)(1)]

Comments _____

2. F020-F023 and F026-F028 Dioxin Wastes: Does the generator correctly determine the appropriate treatability group/treatment standard for each dioxin waste?

Yes ☐ No ☐ NA ☒

If yes, list each waste code and check the correct treatability group.

Waste Code	Wastewater*	Nonwastewater
_____	_____	_____
_____	_____	_____
_____	_____	_____

Comments _____

*Less than 1% TOC by weight and less than 1% total suspended solids (TSS) by weight. [40 CFR 268.2(f)]

3. First, Second, and Third Third Wastes:

- a. Does the generator correctly determine the appropriate treatability group/treatment standard for each waste?

Yes ☒ No ☐ NA ☐

If available, list each waste code and check the correct treatability group:

Waste Code	Subcategory	Wastewater*	Nonwastewater
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* Less than 1% TOC by weight and less than 1% total suspended solids (TSS) with the following exceptions: K011, K013, and K014 wastewaters - less than 5% by weight TOC and less than 1% by weight TSS; K103 and K104 wastewaters - less than 4% by weight TOC and less than 1% by weight TSS. [40 CFR 268.2(f)(2) and (3)]

Comments _____

- b. Do the assigned treatment standards for listed wastes cover constituents that may cause the waste to exhibit any characteristics? [40 CFR 268.9 (b)]

Yes ☒ No ☐ NA ☐

- c. Does the generator specify alternative treatment standards for lab packs?*

Yes ☒ No ☐ NA ☐

*Use of the alternative treatment standards is not required. [55 FR 22629]

If yes, do lab packs only contain the following wastes? [40 CFR 268.42(c)(2)]

No ☐ Organometallics: 40 Part 268, Appendix IV constituents
☐ Organics: 40 CFR Part 268, Appendix V constituents

*Unregulated wastes and hazardous wastes which meet treatment standards may be commingled in the appropriate Appendix IV and V lab pack. [55 FR 22629]

- d. Does the generator specify alternative treatment standards for F039 multi-source leachate?*

Yes ☐ No ☐ NA ☒

*Use of the alternative treatment standards is required. [55 FR 22619]

4. California List Wastes: Has the generator correctly identified the treatability group and treatment standard/prohibition level for the following wastes? [55 FR 22675]

- a. Liquid hazardous wastes containing PCBs ≥ 50 ppm

Yes ☒ No ☐ NA ☐

If yes, check the appropriate treatability group:

☐ 50 to 500 ppm PCBs
☐ ≥ 500 ppm PCBs

- b. Listed or characteristic wastes containing $\geq 1,000$ mg/l (liquids) or mg/kg (non-liquids) HOCs, which are not listed or characterized by the HOC content

Yes ☒ No ☐ NA ☐

If yes, check the appropriate treatability group:

- ☐ Dilute HOC wastewater (1,000 mg/l to 10,000 mg/l HOCs)
☐ All other HOCs greater than or equal to the prohibition level of 1,000 mg/l (liquids) or mg/kg (non-liquids)

- c. Liquid hazardous wastes that exhibit a characteristic and also contain ≥ 134 mg/l nickel and/or ≥ 130 mg/l thallium

Yes ☒ No ☐ NA ☐

5. National Capacity Variance Wastes: Have all applicable California List prohibitions been identified for wastes covered under national capacity variances? (See Appendix A.)

Yes ☒ No ☐ NA ☐

If a wastestream contains a mixture of wastes, and a variance only applies to some of the waste codes, has the generator identified all applicable treatment standards and California List prohibitions? (See Appendix A.)

Yes ☒ No ☐ NA ☐

If California List prohibitions apply to wastestreams managed by the generator, complete the following table for each waste code, noting the date on which relevant national capacity variances expire.

Waste Code	Cal List Applicability	Expiration Date
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Comments

6. Treatment standards expressed as required technologies: Has the generator specified an alternative method to that required in 40 CFR 268.42?

Yes ☐ No ☒ NA ☐

If yes, list the waste code, the technology specified in 40 CFR 268.42, the alternative method, and documentation of approval. [40 CFR 268.42(b)]

Waste Code	Required Technology	Alternative Method	Approval
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Comments

7. Does the generator mix restricted wastes with different treatment standards for a constituent of concern?

Yes ___ No ☒

If yes, did the generator select the most stringent treatment standards?
[40 CFR 268.41(b) and 268.43(b)]

Yes ___ No ___

Comments _____

B. Waste Analysis

1. Does the generator determine whether restricted wastes exceed treatment standards/prohibition levels at the point of generation?* [268.7(a)]

Yes ☒ No ___

*Note: This determination may be made at the point of disposal if the waste only has a prohibition level in effect.

If no, does the generator ship all restricted wastes as not meeting treatment standards?

Yes ___ No ___

Comments _____

2. Which of the following analytical methods does the generator employ?*

*Note: A "No" answer to applicable questions b. through d. does not necessarily constitute a violation. However, knowledge of waste is rarely adequate if a generator certifies that treatment standard criteria have been met.

- a. Knowledge of waste:

Yes ☒ No ___

If yes, list the wastes for which applied knowledge was used and describe the basis of determination. Attach documentation. [40 CFR 268.7(a)(5)]

- b. TCLP*: Are wastes with treatment standards specified in 40 CFR 268.41 analyzed using TCLP?** (BDAT*** = stabilization/immobilization technology)

Yes ☒ No ___ NA ___

*TCLP = Toxicity Characteristic Leaching Procedure [40 CFR Part 268, Appendix I, EPA Test Method 1311]

**See Appendix C for exceptions.

***BDAT = best demonstrated available technology. See Appendix A.

If yes, list the wastes for which TCLP was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results. [40 CFR 268.7(a)(5)]

- c. Total constituent analysis: Are wastes with treatment standards specified in 268.43 analyzed using total constituent analysis?* (BDAT = destruction/removal technology)

Yes ☒ No ☐ NA ☐

*See Appendix C for exceptions.

If yes, list the wastes for which total constituent analysis was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results. [40 CFR 268.7(a)(5)]

- d. PFLT*: Was PFLT used to determine if California List constituents were contained in *liquid* hazardous waste?

Yes ☒ No ☐ NA ☐

*PFLT = Paint Filter Liquids Test [Test Method 9095, EPA Publication No. SW-846]

If yes, list the wastes for which PFLT was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results. [40 CFR 268.7(a)(5)]

3. Does the generator treat restricted wastes in 90-day tanks or containers regulated under 40 CFR 262.34 (permissible in some states)?

Yes ☐ No ☒ (If No, go to 4.)

Does the generator treat the wastes to meet appropriate treatment standards/prohibition levels?

Yes ☐ No ☒

If yes, has the generator prepared a waste analysis plan detailing the frequency of testing to be conducted? 40 CFR 268.7(a)(4)]

Yes ☐ No ☐ (If No, go to 4.)

Does the plan fulfill the following? [40 CFR 268.7(a)(4)(i)]

- ☐ Based on a detailed chemical and physical analysis of a representative sample
☐ Contains information necessary to treat the wastes in accordance with 40 CFR Part 268 requirements

Has the plan been filed with the Regional Administrator (return receipt, Federal Express slip, etc. required for verification)? [40 CFR 268.7(a)(4)(ii)]

Yes ___ No ___

Comments _____

4. Dilution Prohibition [40 CFR 268.3]:

- a. Does the generator mix prohibited* wastes with different treatment standards?

*See Appendix E for distinction between restricted and prohibited wastes.

Yes ___ No ☒ (If No, go to b.)

List the wastes _____

Are the wastes amenable to the same type of treatment? [55 FR 22666]

Yes ___ No ___

Comments _____

- b. Does the generator dilute prohibited wastes to meet treatment standard criteria, or render them non-hazardous? [55 FR 22665-22666]

Yes ___ No ☒ (If No, go to c.)

Check appropriate category:

- ☐ Dilutes to meet treatment standards
☐ Dilutes to render waste non-hazardous

Do the wastes fall into the following categories? (Check if appropriate.) [40 CFR 268.3(b)]

- ☐ Managed in treatment systems regulated under the Clean Water Act
☐ Non-toxic* characteristic wastes
☐ Treatment standard specified in 40 CFR 268.41 or 268.43

*Non-toxic = D001(except high TOC nonwastewaters), D002, and D003(except cyanides and sulfides). [55 FR 22666]

If the wastes do not fall into the above categories, briefly describe the conditions under which they were diluted.

- c. Based on an assessment of points a. and b., and any other relevant circumstances, does the generator dilute prohibited wastes as a substitute for adequate treatment? [40 CFR 268.3(a)]

Yes ___ No ☒

Comments _____

5. F039 Multi-source leachate: Has the generator run an initial analysis for all constituents of concern in 40 CFR 268.41 and 268.43? [55 FR 22620]

Yes ___ No ___ NA ☒

C. Management

1. On-Site Management

- a. Are restricted wastes treated (other than in a RCRA exempt unit), stored for greater than 90 (small quantity generator* - 180) days, or disposed on site?

Yes ☒ No ___

(If yes, the TSD Checklist must also be completed.)

* Small quantity generator = generator of greater than or equal to 100 kg/mo. but less than 1,000 kg/mo. hazardous waste, or less than 1 kg/mo. acutely hazardous waste

Comments stored

- b. If the generator treats characteristic wastes in systems regulated under the Clean Water Act, have the following been documented: the determination of restriction, how restricted wastes are managed, and why wastes discharged pursuant to an NPDES permit are not prohibited (if applicable)? [55 FR 22662]

Yes ___ No ___ NA ☒

- c. If the generator treats characteristic wastes in RCRA exempt units to render them non-hazardous, are the wastes managed as restricted until 40 CFR Part 268 treatment standards are met?* [40 CFR 268.9(d)]

Yes ___ No ___ NA ☒

*This applies to both concentration based treatment standards specified in 40 CFR 268.41 and 268.43, and to some 40 CFR 268.42 required methods which result in treatment below the characteristic level. See Appendix D.

2. Off-Site Management: Waste Exceeds Treatment Standards

- a. Does the generator ship any waste that exceeds treatment standards /prohibition levels (not subject to a national capacity variance) to an off-site treatment or storage facility?

Yes ☒ No ___ (If No, go to 3.)

Identify waste code(s) and off-site treatment or storage facilities to which wastes are shipped.

Waste Code

Receiving Facility

_____	_____
_____	_____
_____	_____

Does the generator provide a notification to the treatment or storage facility?
[40 CFR 268.7(a)(1)]

Yes ☒ No ☐ (If No, go to 3.)

If the generator specifies alternative treatment standards for lab packs, is the certification required in 40 CFR 268.7(a)(7) or (8) included with the notification?

Yes ☒ No ☐ NA ☐

b. Is a notification sent with each waste shipment?

Yes ☒ No ☐

If no, is the waste subject to a tolling agreement pursuant to 262.20(e) (small quantity generator only)?

Yes ☐ No ☐ (If No, go to 3.)

List waste codes and subsequent handler with whom a contractual tolling agreement is held.

<u>Waste Code</u>	<u>Subsequent Handler</u>
_____	_____
_____	_____
_____	_____

Did the small quantity generator provide a notification to the receiving facility with the first waste shipment subject to the tolling agreement? [40 CFR 268.7(a)(9)]

Yes ☐ No ☐

3. Off-Site Management: Waste Meets Treatment Standards

a. Does the generator ship waste that meets treatment standards/prohibition levels to an off-site disposal facility?

Yes ☐ No ☒ (If No, go to 4.)

Identify waste code(s) and off-site disposal facilities:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Does the generator provide a notification and a certification to the disposal facility? [40 CFR 268.7(a)(2)(i) and 268.7(a)(2)(ii)]?

Yes ☐ No ☐ (If No, go to d.)

- b. Are a notification and a certification sent with each waste shipment?

Yes ___ No ___

If no, is the waste subject to a tolling agreement pursuant to 262.20(e) (small quantity generator only)?

Yes ___ No ___ (If No, go to c.)

List waste codes and subsequent handler with whom a contractual tolling agreement is held.

<u>Waste Code</u>	<u>Subsequent Handler</u>
_____	_____
_____	_____
_____	_____

Did the small quantity generator provide a notification and a certification to the receiving facility with the first waste shipment subject to the tolling agreement? [40 CFR 268.7(a)(9)]

Yes ___ No ___

- c. Are characteristic wastes which have been rendered non-hazardous (in a RCRA exempt unit) shipped to a Subtitle D facility?

Yes ___ No ☒ NA ___ (If No or NA, go to 4.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are a notification and a certification for each shipment sent to the Regional Administrator or authorized State? [40 CFR 268.9(d)(1) and 268.7(b)(5)]?

Yes ___ No ___

4. Off-Site Management: Wastes Subject to Variances, Extensions, or Petitions

- a. Does the generator ship wastes to a treatment, storage, or disposal facility which are subject to a national capacity variance (40 CFR Part 268, Subpart C), or case-by-case extension (40 CFR 268.5)?

Yes ☒ No ___ (If No, go to 5.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Does the generator provide notification to the off-site receiving facility that the waste is not prohibited from land disposal? [40 CFR 268.7(a)(3)]

Yes ☒ No ☐

b. Is a notification sent with each waste shipment?

Yes ☒ No ☐

If no, is the waste subject to a tolling agreement pursuant to 40 CFR 262.20(e) (small quantity generator only)?

Yes ☐ No ☐ (If No, go to 5.)

List waste codes and subsequent handler with whom a contractual tolling agreement is held.

Waste Code	Subsequent Handler
_____	_____
_____	_____
_____	_____

Did the small quantity generator provide a notification to the receiving facility with the first waste shipment subject to the tolling agreement? [40 CFR 268.7(a)(9)]

Yes ☐ No ☐

5. Records Retention

Does the generator retain on site copies of all notifications, certifications, and other relevant documents for a period of 5 years? [40 CFR 268.7(a)(6)]

Yes ☒ No ☐

Are copies of relevant tolling agreements, along with the LDR notification and/or certification, kept on site for at least 3 years after expiration or termination of the agreement? [40 CFR 268.9]

Yes ☐ No ☐ NA ☒

Do LDR documents reflect proper management of wastes previously covered under expired national capacity variances, case by case extensions and the soft hammer provision*?

Yes ☒ No ☐ NA ☐

*See Appendix B. Note that the soft hammer provision expired as of 05/08/90. Soft hammer wastes which had treatment standards established in the Third Third rule were granted a minimum 90-day national capacity variance to 08/08/90.

Comments _____

RCRA LAND DISPOSAL RESTRICTION INSPECTION

IV. TSD REQUIREMENTS

A. Waste Analysis [40 CFR 268.7(b), 264.13, and 265.13]

1. Does the waste analysis plan address the following LDR waste categories?
[40 CFR 264.13(b)(6) and 265.13(b)(6)]

F001-F005 Spent Solvents	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
F020-F023 and F026-F028 Dioxins	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
California List Wastes	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
First, Second, and Third Third Wastes	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>

Comments _____

2. Has the waste analysis plan been revised to address F039 multi-source leachate?

Yes ☐ No ☐ NA ☒

3. What date was the waste analysis plan last revised? ____/____/____

4. Does analytical data contain all the information required to treat, store, or dispose of restricted wastes? [40 CFR 264.13(a)(1) and 265.13(a)(1)]

Yes ☒ No ☐

If yes, which of the following are sources of analytical data? (More than one may apply.):

☐ Generator provides data
☐ Facility performs analyses in on-site laboratory
☐ Facility contracts analyses at off-site laboratory

If the generator provides data, does the facility provide corroborative testing? [40 CFR 264.13(a)(2) and 265.13(a)(2)]

Yes ☐ No ☒ NA ☐

If analyses are conducted off site, identify lab: _____

- a. Are wastes with treatment standards specified in 40 CFR 268.41 analyzed using the toxicity characteristic leaching procedure (TCLP)?* (BDAT** = stabilization/immobilization technology) [40 CFR 268.7(b)(1)]

Yes ☒ No ☐ NA ☐

*See Appendix C for exceptions.

**BDAT = best demonstrated available technology. See Appendix A.

If yes, list the wastes for which TCLP was used and provide the date of last test, frequency of testing, and note any problems. Attach test results. [40 CFR 264.73 (b)(3) and 265.73(b)(3)]

- b. Are wastes with treatment standards specified in 40 CFR 268.43 analyzed using total constituent analysis?* (BDAT = destruction/removal technology) [40 CFR 268.7(b)(3)]

Yes ☒ No ☐ NA ☐

*See Appendix C for exceptions.

If yes, list the wastes for which total constituent analysis was used and provide the date of last test, frequency of testing, and note any problems. Attach test results. [40 CFR 264.73 (b)(3) and 265.73(b)(3)]

- c. Is the paint filter liquids test (PFLT) used to determine if California List wastes are contained in *liquid* hazardous waste? [40 CFR 268.32(i)]

Yes ☒ No ☐ NA ☐

If yes, list the wastes for which PELT was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results. [40 CFR 264.73(b)(3) and 265.73(b)(3)]

B. Operating Record [40 CFR 264.73 and 265.73]

1. Does the operating record contain records and results of waste analyses performed as specified in 40 CFR 268.4 and/or 40 CFR 268.7(b)? [40 CFR 264.73(b)(3) and 265.73(b)(3)]

Yes ☒ No ☐

2. Does the operating record contain copies of LDR notifications and certifications?* [40 CFR 264.73(b)(11), (13), and (15) and 40 CFR 265.73(b)(11), (13), and (15)]

Yes ☒ No ☐

*Include both those received from generators, and those prepared for off-site shipments.

3. Does the operating record include appropriate documentation for restricted wastes which are managed wholly on site? [40 CFR 264.73(b)(12), (14), and (16) and 265.73(b)(12), (14), and (16)]

Yes ☒ No ☐ NA ☐

Does the documentation discussed in points 2. and 3. reflect proper historical management of wastes previously covered under expired national capacity variances, case by case extensions, and the soft hammer provision?*

Yes ☒ No ☐ NA ☐

*Note that the soft hammer provision expired as of 05/08/90. Soft hammer wastes which had treatment standards established in the Third Third rule were granted a minimum 90-day national capacity variance to 08/08/90.

C. Storage [40 CFR 268.50]

1. Are prohibited* wastes stored on site in containers?

Yes ☐ No ☒ (If No, go to 2.)

*See Appendix E for distinction between restricted and prohibited wastes.

Are all containers clearly marked to identify the contents and date(s) entering storage? [40 CFR 268.50(a)(2)(i)]

Yes ☐ No ☐

Have wastes been stored for more than one year since the applicable LDR regulations went into effect?

Yes ☐ No ☐ (If No, go to 2.)

Can the facility show that such accumulation is necessary to facilitate property recovery, treatment, or disposal? [40 CFR 268.50 (c)]

Yes ☐ No ☐

If yes, state how: _____

2. Are prohibited wastes stored on site in tanks?

Yes ☐ No ☒ (If No, go to 3.)

Are all tanks clearly marked with a description of the contents, the quantity of each hazardous waste received, and date each period of accumulation begins, or is such information recorded and maintained in the operating record? [40 CFR 268.50(a)(2)(ii)]

Yes ☐ No ☐

Have tanks been emptied at least once per year since the applicable LDR regulations went into effect?

Yes ☐ No ☐ (If Yes, go to 3.)

Can the facility show that such accumulation is necessary to facilitate proper recovery, treatment, or disposal? [40 CFR 268.50(c)]

Yes ___ No ___

If yes, state how: _____

3. Does the facility store liquid hazardous waste containing PCBs at concentrations greater than or equal to 50 ppm?

Yes ___ No ☒ (If No, go to D.)

Does the facility meet the TSCA criteria in 40 CFR 761.65(b)? [40 CFR 268.50(f)]

Yes ___ No ___

Have these wastes been stored for more than one year? [40 CFR 268.50(f)]

Yes ___ No ___

D. Treatment

1. Does the facility treat restricted wastes other than in surface impoundments?

Yes ___ No ☒ (If No, do not complete this section. Go to E.)

2. Are required technologies used to treat wastes which have treatment standards specified in 40 CFR 268.42? [40 CFR 268.40(b)]

Yes ___ No ___ NA ___ (If Yes or NA, go to 3.)

Was an alternative method approved?

Yes ___ No ___

List each waste code, the technology specified in 40 CFR 268.42, and the alternative method. Check if approval of the alternative method is documented. [40 CFR 268.42(b)]

<u>Waste Code</u>	<u>Required Technology</u>	<u>Alternative Method</u>	<u>Approval</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

3. Lab packs: If alternative treatment standards are specified, are incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 treated in compliance with the subpart D treatment standards for these characteristic wastes? [40 CFR 268.42(c)(4)]

Yes ☒ No ___ NA ___

4. Describe all other waste codes and treatment processes:

<u>Waste Code</u>	<u>Treatment Processes</u>
_____	_____
_____	_____
_____	_____

5. Characteristic wastes:

Is the 40 CFR Part 268 treatment standard lower than the 40 CFR Part 261 characteristic level?*

Yes ___ No ___

*This applies to both concentration based treatment standards specified in 40 CFR 268.41 and 268.43, and to some 40 CFR 268.42 required methods which result in treatment below the characteristic level. See Appendix D.

If yes, does the facility manage the waste as restricted until 40 CFR Part 268 treatment standards are met, even after the waste is rendered non-hazardous? [40 CFR 268.9(d)]

Yes ___ No ___

Comments _____

6. Dilution Prohibition [40 CFR 268.3]:

a. Does the facility mix prohibited wastes with different treatment standards?

Yes ___ No ☒ (If No, go to c.)

List the wastes _____

b. Are the wastes amenable to the same type of treatment? [55 FR 22666]

Yes ___ No ___

If yes, is this method used for the aggregated wastes?

Yes ___ No ___

Comments _____

c. Based on an assessment of points a. and b., or any other relevant information, is dilution used as a substitute for treatment? [40 CFR 268.3(a)]

Yes ___ No ___

Comments _____

7. Does the facility, in accordance with an acceptable waste analysis plan, test residues from all treatment processes? [40 CFR 268.7(b)]

Yes ☒ No ☐

Comments _____

8. Does the facility ship any characteristic wastes which have been rendered non-hazardous to a Subtitle D facility?

Yes ☐ No ☒ (If No, go to 9.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are a notification and a certification for each shipment sent to the Regional Administrator or authorized State? [40 CFR 268.9(d)(1) and 268.7(b)(5)]

Yes ☐ No ☐

9. Does the facility ship any wastes or treatment residues to an off-site land disposal facility?

Yes ☐ No ☒ (If No, go to 10.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are a notification and a certification provided to the land disposal facility with each waste shipment? [40 CFR 268.7(b)(4) and 40 CFR 268.7(b)(5)]

Yes ☒ No ☐

10. Does the facility ship any wastes or treatment residues to be further managed at a different treatment or storage facility?

Yes ☒ No ☐ (If No, go to E.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are appropriate generator notifications and certifications provided to the receiving facility with each waste shipment? [40 CFR 268.7(b)(6)]

Yes ☒ No ☐

E. Surface Impoundments [40 CFR 268.4]

1. Are restricted wastes placed in surface impoundments for treatment?

Yes ☐ No ☒ (If No, go to F.)

List _____

2. Are evaporation or dilution the only recognizable treatment occurring in the surface impoundment? [40 CFR 268.3(a) and 268.4(b)]

Yes ☐ No ☐

Comments _____

3. Has the facility submitted to the Agency a waste analysis plan and certification of compliance with minimum technology requirements and ground-water monitoring requirements? [40 CFR 268.4(a)(4)]

Yes ☐ No ☐

4. If the minimum technology requirements have not been met, has a waiver been granted for that unit? [40 CFR 268.4(a)(3)(ii)]

Yes ☐ No ☐ NA ☐

5. Are representative samples of sludge and supernatant from the surface impoundment tested separately, acceptably, and in accordance with the sampling frequency and analyses specified in the waste analysis plan? (Attach test results.) [40 CFR 268.4(a)(2)(i)]

Yes ☐ No ☐

6. Does the operating record adequately document the results of waste analyses performed in accordance with 40 CFR 268.4? [40 CFR 264.73(b)(3) and 265.73(b)(3)]

Yes ☐ No ☐

Comments _____

7. Do the treatment residues (sludges or liquids) exceed applicable treatment standards/prohibition levels?

Sludge Yes ☐ No ☐ Waste Code _____
 Supernatant Yes ☐ No ☐ Waste Code _____

Provide the frequency of analyses conducted on treatment residues:

8. If sludge residues exceed treatment standards/prohibition levels, are they removed on an annual basis? [40 CFR 268.4(a)(2)(ii)]

Yes ☐ No ☐ NA ☐

Comments _____

Are residues subsequently managed in another surface impoundment? [40 CFR 268.4(a)(2)(iii)]

Yes ☐ No ☐

9. If supernatant is determined to exceed treatment standards, is annual throughput greater than impoundment volume? [40 CFR 268.4(a)(2)(ii)]

Yes ☐ No ☐ NA ☐

Comments _____

F. Land Disposal

1. Are restricted wastes placed in or on the land in units such as landfills, surface impoundments*, waste piles, land treatment units, salt domes/beds, mines/caves, concrete vaults, or bunkers? [40 CFR 268.2(c)]

Yes ☐ No ☒ (If No, go to G.)

*Note: Do not include surface impoundments addressed in E.

If yes, specify which units and what wastes each unit has received:

Unit	Waste
_____	_____
_____	_____
_____	_____

2. Does the facility, in accordance with an acceptable waste analysis plan, test prohibited wastes prior to land disposal to ensure that all applicable treatment standards and/or prohibition levels have been met? [40 CFR 268.7(c)(2)]

Yes ☐ No ☐

Comments _____

3. Does the facility test wastes to ensure that they do not exhibit any characteristics at the point of disposal?* [40 CFR 268.9(c)]

Yes ___ No ___ NA ___

*Note: A waste may exceed a characteristic level only if the treatment standard for that characteristic has been met.

4. Does the operating record adequately document the results of waste analyses performed in accordance with 40 CFR 268.7(c)? [40 CFR 264.73(b)(3) and 265.73(b)(3)]

Yes ___ No ___

If yes, at what frequency are analyses performed? _____

5. Does the facility land dispose of restricted wastes which are not prohibited?

Yes ___ No ___ (If No, go to 6.)

List waste codes in appropriate category below:

National Capacity Variance (40 CFR Part 268, Subpart C) _____

Case-By-Case Extension (40 CFR 268.5) _____

No-Migration Petition (40 CFR 268.6) _____

Treatment Standard Variance (40 CFR 268.44) _____

Does the operating record contain records of the quantities, date of placement, and a copy of the generator notification [40 CFR 268.7(a)(3)] for each shipment of restricted waste subject to a case-by case extension or no-migration petition? [40 CFR 264.73(b)(10) and 265.73(b)(10)]

Yes ___ No ___ NA ___

Do land disposal units receiving wastes covered by a national capacity variance or case-by-case extension meet the requirements in 40 CFR 268.5(h)(2)?

Yes ___ No ___ NA ___

If the facility has a case-by-case extension, is progress being made as described in reports to the Regional Administrator?

Yes ___ No ___ NA ___

6. Are restricted wastes placed in underground injection wells?

Yes ___ No ___ List _____

G. Other Wastestreams

1. Does the facility generate wastes other than residues from RCRA treatment units?

Yes ☐No ☒

(If No, go to H.)

2. On-Site Management

- a. If characteristic wastes are treated in systems regulated under the Clean Water Act, have the following been documented: the determination of restriction, how restricted wastes are managed, and why wastes discharged pursuant to an NPDES permit are not prohibited (if applicable)? [55 FR 22662]

Yes ☐No ☐NA ☐

- b. If characteristic wastes are treated in RCRA exempt units to render them non-hazardous, are the wastes managed as restricted until 40 CFR Part 268 treatment standards are met?* [40 CFR 268.9(d)]

Yes ☐No ☐NA ☐

*This applies to both concentration based treatment standards specified in 40 CFR 268.41 and 268.43, and to some 40 CFR 268.42 required methods which result in treatment below the characteristic level. See Appendix D.

3. Off-Site Management: Waste Exceeds Treatment Standards

Are wastes that exceed treatment standards/prohibition levels (not subject to a national capacity variance) shipped to an off-site treatment or storage facility?

Yes ☐No ☐

(If No, go to 4.)

Identify wastes code(s) and off-site treatment or storage facilities to which wastes are shipped.

Waste CodeReceiving Facility

Are LDR notifications provided for each shipment to the treatment or storage facility? [40 CFR 268.7(a)(1)]

Yes ☐No ☐

(If No, go to 4.)

If alternative treatment standards are specified for lab packs, is the certification required in 40 CFR 268.7(a)(7) or (8) included with the notification?

Yes ___ No ___ NA ___

4. Off-Site Management: Wastes Meets Treatment Standards

- a. Are wastes that meet treatment standards/prohibition levels shipped to an off-site disposal facility?

Yes ___ No ___ (If No, go to 5.)

Identify waste code(s) and off-site disposal facilities:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are LDR notifications and certifications provided for each shipment to the disposal facility? [40 CFR 268.7(a)(2)(i) and 268.7(a)(2)(ii)]?

Yes ___ No ___ (If No, go to b.)

- b. Are characteristic wastes which have been rendered non-hazardous (in a RCRA exempt unit) shipped to a Subtitle D facility?

Yes ___ No ___ NA ___ (If No or NA, go to 5.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Are a notification and a certification for each shipment sent to the Regional Administrator or authorized State? [40 CFR 268.9(d)(1) and 268.7(b)(5)]?

Yes ___ No ___

5. **Off-Site Management: Wastes Subject to Variances, Extensions, or Petitions**

- a. Are wastes that are subject to a national capacity variance (40 CFR Part 268, Subpart C) or a case-by-case extension (40 CFR 268.5) shipped to a treatment, storage, or disposal facility?

Yes ☐ No ☐ (If No, go to 6.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

- b. Are LDR notifications (stating that the waste is not prohibited from land disposal) provided for each shipment to the off-site receiving facility? [40 CFR 268.7(a)(3)]

Yes ☐ No ☐

6. **Dilution Prohibition [40 CFR 268.3]:**

- a. Are prohibited* wastes with different treatment standards mixed?

*See Appendix E for distinction between restricted and prohibited wastes.

Yes ☐ No ☐ (If No, go to b.)

List the wastes

Are the wastes amenable to the same type of treatment? [55 FR 22666]

Yes ☐ No ☐

Comments

- b. Are prohibited wastes diluted to meet treatment standard criteria, or render them non-hazardous? [55 FR 22665-22666]

Yes ☐ No ☐ (If No, go to c.)

Check appropriate category:

☐ Dilutes to meet treatment standards
☐ Dilutes to render waste non-hazardous

Do wastes fall into the following categories? (Check if appropriate.) [40 CFR 268.3(b)]

- ☐ Managed in treatment systems regulated under the Clean Water Act
☐ Non-toxic* characteristic wastes
☐ Treatment standard specified in 40 CFR 268.41 or 268.43

*Non-toxic = D001 (except high TOC nonwastewaters), D002, and D003 (except cyanides and sulfides). [55 FR 22666]

If the wastes do not fall into the above categories, briefly describe the conditions under which they were diluted.

- c. Based on an assessment of points a. and b., and any other relevant circumstances, are prohibited wastes diluted as a substitute for adequate treatment? [40 CFR 268.3(a)]

Yes ☐ No ☐

Comments

H. Additional Comments, Concerns, or Issues Not Addressed in the Checklist:
